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CERTIFICATE UNDER 37 CFR 3.73(b) 0/542508

| Applicant: Cı | raig Duane DICKINSON et.al. |
|---|---|
| Application N | Io.: US Nat'l Phase of PCT/US2004/000019Filed: 21 January 2004 |
| Entitled: <u>HUM</u> | IAN IL-1 BETA ANTAGONISTS |
| A DDI TED MO | OLECULAR EVOLUTION, INC, a CORPORATION |
| (Name of Assignee) | (Type of Assignee, e.g. corporation, partnership, university, government agency, etc.) |
| certifies that it is | the assignee of the entire right, title and interest in the patent application identified above by virtue of either: |
| A. [] An assig | gnment from the inventor(s) of the patent application identified above. |
| | assignment was recorded in the Patent and Trademark Office at Reel, Frame. ne assignment is being submitted separately for recordation; a copy of this assignment is attached. |
| | · OR |
| B. [] A chain o | of title from the inventor(s), of the patent application identified above, to the current assignee as shown below: |
| · 1. | From: To: The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached. |
| 2. | From: To: The document was recorded in the Patent and Trademark Office at Reel, or for which a copy thereof is attached. |
| 3. | From: To: The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached. |
| [] | Additional documents in the chain of title are listed on a supplemental sheet. |
| [] Copies of as | signments or other documents in the chain of title are attached. |
| The undersigned | (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee. |
| belief are believe like so made, are such willful false | that all statements made herein of my own knowledge are true, and that all statements made on information and ed to be true; and further, that these statements are made with the knowledge that willful false statements, and the punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that e statements may jeopardize the validity of the application or any patent issuing thereon. |
| Date | Lynn D. Apelgren Patent Attorney |

Send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

ASSIGNMENT

WHEREAS I, am an inventor or co-inventor (with the persons listed below) of an invention that is the subject of a patent application ("Application") which is entitled HUMAN IL-1 BETA ANTAGONISTS, containing 47 pages and 0 drawings, and which:

| | ☐ is being filed: ☐ was filed: |
|-----|---|
| | in the United States Patent and Trademark Office in the United Kingdom Patent Office in the European Patent Office in the Spanish Patent Office as a European Application in as an international application under the Patent Cooperation Treaty ("PCT"), with: |
| | ☐ United States Patent and Trademark Office acting as Receiving Office or ☐ International Bureau acting as Receiving Office; ☐ |
| | on 21 January 2004 and accorded serial number PCT/US2004/000019; |
| and | |

WHEREAS APPLIED MOLECULAR EVOLUTION, INC., a Delaware corporation having its principal place of business at 3520 Dunhill Street, San Diego, California 92121, wishes to acquire the entire interest in all inventions disclosed in such Application;

NOW, THEREFORE, in consideration of my employment, any agreements related thereto, or other good and valuable consideration, the receipt of which is hereby acknowledged, I hereby assign to Applied Molecular Evolution, Inc., its successors and assigns (collectively "AME") my entire right, title and interest in, to and under the Application, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all present or future patent applications to such inventions that may be filed in any country, inclusive of, but not limited to, continuations, continuations-in-part, divisions, substitutions, reexaminations, reissues, international applications filed under the PCT, United States provisional patent applications, subsequent United States provisional patent applications claiming some or all of this invention, certificates of addition, utility models, petty patents, as well as all other intellectual property related to the Application, inclusive of, but not limited to, supplementary protection certificates; and any related patent term extensions which may be granted for Letters Patent with respect to the Application; all of the above to be held and enjoyed by AME for its own use and enjoyment to the full end of the term or terms for which such Letters Patent and related intellectual property rights may be granted, as fully and entirely as the same would have been held and enjoyed by me had this Assignment and sale to AME not been made.

For myself and for my heirs, successors and legal representatives, I covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into

which would conflict with this Assignment.

For myself and for my heirs, successors and legal representatives, I further covenant and agree with AME that upon request I and they will, without further consideration than that now paid, but at the expense of AME: (i) execute original, provisional, substitute, continuation, divisional, continuation-in-part, reexamined, or reissued applications, amended specifications, or rightful declarations or oaths for such application; (ii) communicate to AME any facts known to me or them relating to such inventions or the history thereof; (iii) execute preliminary statements and testify in any interference proceedings, litigation discovery proceedings and depositions, oppositions, cancellation proceedings, priority contests, public use proceedings, administrative agency proceedings, litigation and other court actions and the like; (iv) execute and deliver any application papers, affidavits, declarations, assignments, or other instruments; and (v) do all other acts which, in the opinion of counsel for AME, may be necessary or desirable to secure the grant of Letters Patent and related intellectual property to AME or its nominees, in the United States and in all other countries where AME may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for AME and to vest and confirm in AME or its nominees the full and complete legal and equitable title to all such Letters Patent and related intellectual property.

| IN WITNESS WHEREOF I have | executed this assignment on the date indicated |
|----------------------------------|--|
| below. | |
| 7/8/2005 Date | eraig Duano Dickinson |
| | 15165 Susità Street Citizenship: United States of America |
| 07 08 2005 Date | Alain Philippe Vasserot |
| , | 6421 La Paloma Street Citizenship: Switzerland |
| $\frac{07/08/2005}{\text{Date}}$ | Jefffy/Dean Watkins |
| | 3/44/2 Fortuna Ranch Road Citizenship: United States of America |
| Date | Jirong Lu |

| UNITED STATES OF AMERICA | |
|---|--|
| STATE OF Calif | |
| COUNTY OF Sun Diego) SS: | |
| Before me, a Notary Public for <u>Su</u> | Sigo County, State of Calif. |
| , personally appeared Craig Duane of the foregoing instrument this | Dickinson and acknowledged the execution day of XLL, 2005 |
| | US |
| R. DEBRA MALEK Commission # 1418996 Notary Public - California San Diego County My Comm. Expires May 27, 2007 | R. Olma Malu Notary Public Commission Expires: 5/21/05 |
| UNITED STATES OF AMERICA | |
| STATE OF <u>California</u> | |
| COUNTY OF Su Diego) SS: | • |
| Before me, a Notary Public for Sw., personally appeared Alain Philipp of the foregoing instrument this B | be Vasserot and acknowledged the execution day of Yuly, 2005 |
| R. DEBRA MALEK Commission # 1418996 Notary Public - California San Diego County My Comm. Expires May 27, 2007 | Notary Public Commission Expires: 5/27/05 |
| UNITED STATES OF AMERICA | Commission Expires: |
| STATE OF <u>Calify</u> | |
| COUNTY OF Son Diego) SS: | |
| Before me, a Notary Public for, personally appeared Jeffry Dean the foregoing instrument this day or | Watkins and acknowledged the execution of |
| ****** | P Klara 1 / alak |
| R. DEBRA MALEK Commission # 1418996 Notary Public - California San Diego County | Notary Public Commission Expires: 5/37/05 |

ASSIGNMENT

| WHEREAS I, am an inventor or co-inventor (with the persons listed below) of an |
|---|
| invention that is the subject of a patent application ("Application") which is entitled Human |
| IL-1 Beta Antagonists, containing 52 pages, including drawings, and which: |
| |

| is being filed with: | |
|--|----|
| was filed in: | |
| ☑ United States Patent and Trademark Office ☐ United Kingdom Patent Office ☐ European Patent Office ☐ USPTO as Receiving Office under the PCT ☐ Int'l Bureau as Receiving Office under the PCT on January 24, 2003 and accorded serial no. 60/442798. | |
| on January 24, 2003 and accorded serial no. 00/442170. | |
| was filed as an international application under the Patent Cooperation Treat ("PCT"), on with the: | ty |
| ☐ United States Patent and Trademark Office acting as Receiving Office, or ☐ International Bureau acting as Receiving Office; | |
| and was accorded serial number : or | |

WHEREAS ELI LILLY AND COMPANY, an Indiana corporation having its principal place of business at Lilly Corporate Center, Indianapolis, Indiana 46285, wishes to acquire the entire interest in all inventions disclosed in such Application;

NOW, THEREFORE, in consideration of my employment, any agreements related thereto, or other good and valuable consideration, the receipt of which is hereby acknowledged, I hereby assign to Eli Lilly and Company, its successors and assigns (collectively "Lilly") my entire right, title and interest in, to and under the Application, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all present or future patent applications to such inventions that may be filed in any country, inclusive of, but not limited to, continuations, continuations-in-part, divisions, substitutions, reexaminations, reissues, international applications filed under the PCT, United States provisional patent applications, subsequent United States provisional patent applications claiming some or all of this invention, certificates of addition, utility models, petty patents, as well as all other intellectual property related to the Application, inclusive of, but not limited to, supplementary protection certificates; and any related patent

term extensions which may be granted for Letters Patent with respect to the Application; all of the above to be held and enjoyed by Lilly for its own use and enjoyment to the full end of the term or terms for which such Letters Patent and related intellectual property rights may be granted, as fully and entirely as the same would have been held and enjoyed by me had this Assignment and sale to Lilly not been made.

For myself and for my heirs, successors and legal representatives, I covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which

would conflict with this Assignment.

For myself and for my heirs, successors and legal representatives, I further covenant and agree with Lilly that upon request I and they will, without further consideration than that now paid, but at the expense of Lilly: (i) execute original, provisional, substitute, continuation, divisional, continuation-in-part, reexamined, or reissued applications, amended specifications, or rightful declarations or oaths for such application; (ii) communicate to Lilly any facts known to me or them relating to such inventions or the history thereof; (iii) execute preliminary statements and testify in any interference proceedings, litigation discovery proceedings and depositions, oppositions, cancellation proceedings, priority contests, public use proceedings, administrative agency proceedings, litigation and other court actions and the like; (iv) execute and deliver any application papers, affidavits, declarations, assignments, or other instruments; and (v) do all other acts which, in the opinion of counsel for Lilly, may be necessary or desirable to secure the grant of Letters Patent and related intellectual property to Lilly or its nominees, in the United States and in all other countries where Lilly may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for Lilly and to vest and confirm in Lilly or its nominees the full and complete legal and equitable title to all such Letters Patent and related intellectual property.

IN WITNESS WHEREOF I have executed this assignment on the date indicated below.

 $\Lambda \mathcal{I}$

| //-/2-03 Date | Jirong Lu, Co-Inventor 6232 Vancouver Court Indianapolis, Indiana 46236 Citizen of United States of America |
|------------------|---|
| Date | Craig Dean Dickinson, Co-Inventor |
| Date | Alain Philippe Vasserot, Co-Inventor |
| Date | Jeffry Dean Watkins, Co-Inventor |

Page 3 of 3

| UNITED STATES OF AME | RICA |
|---|--|
| STATE OF INDIANA |)) SS: |
| COUNTY OF MARION |) |
| Before me, a Notary Jirong Lu and acknowledge November, 2003. | Public for Morgan County, State of Indiana, personally appeared the execution of the foregoing instrument this 12th day of Selly L. Ramsey Notary Public KELLY L. RAMSEY Commission: |

KELLY L. RAMSEY MY COMMISSION EXPIRES: OCTOBER 30, 2009
RESIDENT OF MARION COUNTY
MORGAN



ASSIGNMENT

WHEREAS ELI LILLY AND COMPANY, an Indiana corporation having its principal place of business at Lilly Corporate Center, Indianapolis, IN 46285 and its affiliates (collectively, "ELI LILLY") is the sole assignee of inventions which are the subject of Letters Patents of the United States and foreign countries ("Patents") identified in the APPENDIX attached hereto and incorporated herein by reference; and

WHEREAS APPLIED MOLECULAR EVOLUTION, INC. PHARMACEUTICALS INCORPORATED, a California corporation having its principal place of business at 3520 Dunhill Street, San Diego, California 92121 and its affiliates (collectively "AME") entered into a Collaboration Agreement ("Agreement") with Eli Lilly and Company on December 17, 2001; and

WHEREAS ELI LILLY AND COMPANY is obligated under the Agreement to assign its entire right, title and interest to such Patents to AME;

NOW, THEREFORE, ELI LILLY, its successors and assigns (collectively "Eli Lilly") hereby assigns, transfers and sets over unto AME, its successors and assigns Eli Lilly's entire right, title and interest in, to and under the Patents, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all present or future patent applications to such inventions that may be filed in the United States or any foreign country, inclusive of, but not limited to, continuations, continuations-in-part, divisions, substitutions, reexaminations, reissues, international applications under the Patent Cooperation Treaty ("PCT"), United States provisional patent applications, certificates of addition, utility models, petty patents, as well as all other intellectual property related to the Patents, inclusive of, but not limited to, supplementary protection certificates, copyrights, and trademarks; and any and all Letters Patents of the United States and of all foreign countries and all related patent term extensions which have been or may be granted for Letters Patents; all of the above to be held and enjoyed by AME for its own use and enjoyment to the full end of the term or terms for which such Letters Patents and related intellectual property rights have been or may be granted, as fully and entirely as the same would have been held and enjoyed by Eli Lilly had this Assignment to AME not been made.

For Eli Lilly and for its successors and legal representatives, Eli Lilly covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

For Eli Lilly for its successors and legal representatives, Eli Lilly further covenants and agrees with AME that upon request a Eli Lilly representative will, without consideration: (i) execute preliminary statements and testify in any interference proceedings, litigation discovery proceedings and depositions, oppositions, cancellation proceedings, priority contests, public use proceedings, administrative agency proceedings, litigation and other court actions and the like; (ii) do all other acts which, in the opinion of counsel for AME, may be reasonably necessary or desirable to secure the grant of Letters Patents and related intellectual property to AME or its nominees, in the United States or any foreign country and to vest and confirm in AME or its nominees the full and complete legal and equitable title to all such Letters Patents and related intellectual property.

| IN WITNESS WHEREOF I have 6 | executed this assignment on the date indicated below. |
|---|--|
| | Steven M. Paul, M.D. Executive Vice President Eli Lilly and Company |
| UNITE | ED STATES OF AMERICA |
| STATE OF INDIANA) ss: COUNTY OF MALO) | November <u>20</u> , 2003 |
| | c for Mario County, State of Indiana, personally owledged the execution of the foregoing instrument this |
| My commission expires: | Hongle J. Idmab Notary Public |
| 2002 | |

APPENDIX

3/3

Lilly Docket P-15950: HUMAN IL-1 BETA ANTAGONISTS

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